AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.111

Serial Number: 10/086,783

Filing Date: February 28, 2002

Title: COCKPIT INSTRUMENT PANEL SYSTEMS AND METHODS WITH REDUNDANT FLIGHT DATA DISPLAY

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AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1) (Currently Amended) A multifunction display (MFD), comprising: a bezel having controls located thereon which are adapted for controlling communication devices, navigational devices, and equipment sensors; and

a <u>reversionary</u> display adjacent to the bezel, wherein the display is adapted to <u>automatically</u> provide a backup presentation of a set of important flight information data, <u>including communication</u>, <u>navigation</u>, and <u>equipment sensor functions</u>, upon the failure of one or more primary instrument displays.

2) (Original) The MFD of claim, wherein the set of important flight information data includes data selected from group consisting of airspeed, attitude, altitude, communication, navigation, and engine data.

3) (Cancelled)

- 4) (Original) The MFD of claim 1, wherein the set of flight information is dependent on an aircraft frame and engine type.
- 5) (Original) The MFD of claim 1, wherein the display is adapted to provide the backup presentation of the set of flight information data upon the actuation of a toggle button located on the MFD.
- 6) (Original) The MVD of claim 1, wherein the display is adapted to be dynamically configurable to adjust a content and a configuration of the backup presentation.
- 7) (Currently Amended) A cockpit instrument system, comprising:
 a first cockpit instrument panel, including a <u>reversionary</u> first display
 enclosed within a first bezel, wherein the first bezel includes navigational controls,

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communication controls, and wherein the first display is operable to present navigational data, communication data, and flight information data including airspeed, attitude, and altitude;

a second cockpit instrument panel located adjacent to the first cockpit instrument panel, the second cockpit instrument panel including a second reversionary display enclosed within a second bezel, wherein the second bezel includes navigational controls, communication controls, and wherein the second display is operable to present navigational data, communication data, and flight information data including detailed engine parameters; and

wherein either the first or the second cockpit instrument panel is adapted to display all of the important flight information data, including airspeed, attitude, altitude, and detailed engine parameters, in a substantially similar format size, location and perspective when one of the first or the second cockpit instrument panels fail, in a backup mode.

8) (Cancelled)

- 9) (Original) The cockpit instrument system of claim 7, wherein the backup mode is provided upon the activation of a button located on either the first or the second cockpit instrument panel.
- 10) (Original) The cockpit instrument system of claim 7, wherein the first and the second cockpit instrument panels are adapted to simultaneously display all of the flight information data including airspeed, attitude, altitude, and detailed engine parameters in a substantially similar format size, location and perspective upon the activation of a button located on either the first or the second cockpit instrument panel.
- 11) (Original) The cockpit instrument system of claim 7, wherein the first cockpit instrument panel and the second cockpit instrument panel include a multifunction display.

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12) (Original) The cockpit instrument system of claim 7, wherein the first cockpit is a primary flight display (PFD) and the second cockpit instrument panel is a navigation display (NAV display).

- 13) (Original) The cockpit instrument system of claim 7, wherein the first cockpit instrument panel and the second instrument panel are positioned side by side, and wherein the system further includes an audio instrument panel located between the first cockpit instrument panel and the second instrument panel.
- 14) (Currently Amended) The cockpit instrument system of claim 7 +, wherein the first bezel and the second bezel further include at least one of transponder controls, GPS controls, autopilot controls, and messaging controls affixed thereon.
- 15) (Currently Amended) A cockpit instrument system, comprising:
 a primary flight display (PPD) having a reversionary capability;
 a secondary flight display (MFD) having a reversionary capability, wherein
 the PFD and the MFD are adjacent to one another; and

wherein both the IFD and the MFD are adapted to display full flight information data in an identical format and size, in a reversionary mode, automatically if either the PFD or MFD is inoperable.

- 16) (Currently Amended) The cockpit instrument system of claim 15, wherein both the PFD and the MFD are adapted to display full flight information data in an identical formation size upon the activation of a button located on either the PFD or the MFD in order to provide full redundancy of the flight information data in the event of a failure of a display screen on either the PFD or MFD.
- 17) (Original) The cockpit instrument system of claim 15, wherein the full flight information data includes airspeed, attitude, altitude and detailed engine parameters.

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- 18) (Original) The cockpit instrument system of claim 17, wherein the detailed engine parameters are configurable in at least three different formats.
- 19) (Original) The cockpit instrument system of claim 17, wherein the detailed engine parameters are dependent upon an aircraft type.
- 20) (Original) The cockpit instrument system of claim 15, wherein the PFD and the MFD are positioned side by side having an audio instrument panel located therebetween, and wherein both the PFD and the MFD are adapted to display full flight information data in an identical format and size upon the activation of a button located on the audio instrument panel.
- 21) (Currently Amended) A method for providing redundant flight information, comprising:

providing a set of important flight information data on one or more multifunction reversionary displays; and

automatically replacing a content of a functional multifunction display with the set of flight information data, including communication, navigation, and equipment sensor functions, upon the failure of one or more primary instrument displays.

- (Original) The method of claim 21, wherein providing the set of important flight information data on one or more multifunction displays includes providing the set of flight information data between a primary flight display (PFD) and a secondary flight display (NAV display).
- 23) (Original) The method of claim 21, wherein providing the set of important flight information data on one or more multifunction displays includes providing the set of flight information data on a pair of adjacent multifunction displays.

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(Original) The method of claim 21, wherein providing the set of important flight information data on one or more multifunction displays includes providing a set of important flight information data selected from the group of airspeed, attitude, altitude, and detailed engine parameter data.

- 25) (Original) The method of claim 21, wherein providing the set of important flight information data on one or more multifunction displays includes providing a set of flight information data which is dependent on an aircraft type.
- 26) (Original) The method of claim 21, wherein replacing a content of a functional multifunction display with the set of important flight information data upon the failure of one or more primary instrument displays includes presenting the set of flight information data on the multifunction display in a substantially similar size, format, location and perspective as the important flight information data was presented on the one or more primary instrument displays.
- 27) (Original) The method of claim 21, wherein replacing a content of a functional multifunction display with the set of important flight information data upon the failure of one or more primary instrument displays includes presenting the set of important flight information data in a dynamically configurable format.
- 28) (Original) The method of claim 21, wherein replacing a content of a functional multifunction display with the set of important flight information data upon the failure of one or more primary instrument displays includes actuating a button to in order to replace the content of the functional multifunction display.

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